

1 ABSTRACT OF THE DISCLOSURE
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3 The invention provides a method and system for recovery of file system
4 data in file servers having mirrored file system volumes. The invention makes use of a
5 “snapshot” feature of a robust file system (the “WAFL File System”) disclosed in the In-
6 corporated Disclosures, to rapidly determined which of two or more mirrored volumes is
7 most up-to-date, and which file blocks of the most recent mirrored volume have been
8 changed from each one of the mirrored file systems. In a preferred embodiment, among a
9 plurality of mirrored volumes, the invention rapidly determines which is the most up-to-
10 date by examining a consistency point number maintained by the WAFL File System at
11 each mirrored volume. The invention rapidly pairwise determines what blocks are shared
12 between that most up-to-date mirrored volume and each other mirrored volume, in re-
13 sponse to a snapshot of the file system maintained at each mirrored volume and are stored
14 in common pairwise between each mirrored volume and the most up-to-date mirrored
15 volume. The invention re synchronizes only those blocks that have been changed be-
16 tween the common snapshot and the most up-to-date snapshot.